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A CASE OF NEURIASIS.

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FREQUENT attempts have been made of late to find a substitute for the name "hysteria," which has for a long time been out of favor with physicians as well as with patients. This effort has been stimulated by the growing disbelief, on the part of many, in the uterine origin of this essentially nervous affection. A satisfactory pathological designation is hardly to be expected in our present state of knowledge. It is difficult, also, to include such a multiplicity of various symptoms under one head. Briquet's definition of hysteria, "a perversion of the vital acts which manifest the affections and passions," makes it a form of moral insanity. Dr. Reynolds says: "The hysteric state is essentially one of mental perturbation." Dr. Radcliffe considers hysteria to be "a want of will power in the control of the emotional nature, due to a susceptible nervous temperament." He gives to this state the name of "*neuriasis*." Others prefer the term *neurasthenia*. I think Dr. Geo. M. Beard, of New York, claims the introduction of this term, as applied to nervous exhaustion, giving rise to symptoms of hysteria. Although this term is very appropriate for, perhaps, the majority of cases, hysteria does occur in individuals physically robust, who show little evidence of general debility. Sir James Paget says hysterical patients may be called "hyperneurotic," if they or their friends prefer Greek to English. In a recent lecture, at St. Bartholomew's Hospital, he considers the surgical aspect of hysteria under the term "*neuromimesis*," or the nervous mimicry of organic diseases.

To call a person, given to extravagant and erratic nervous manifestations, hyperneurotic, is to overlook the fact that, as in muscular spasm, there is really a loss of inhibitory power, allowing unregulated action to occur. The person is really neurasthenic as to the particular nerve centre involved. The hyperneurosis is merely a symptom. So is the uterine disorder, the frequency of which suggested the name hysteria. This must in many, if not in most cases, be classed with the host of other mimetic and pseudo-organic diseases, so common in this protean disorder.

I wish here to quote at length what Sir James Paget says on this point. He gives forcible expression to opinions which have been frequently advanced, as well as warmly opposed, in this city. As he is neither a uterine specialist nor an alienist, his views may be considered reasonably impartial. He says: "In the defective ovarian and uterine functions of certain patients, some see the centre and chief substance of the whole disease—a very mischievous fallacy. Of course, the sexual organs appear generally in fault to those who are rarely consulted for the diseases of other parts; but in general practice they are, in a large majority of cases, as healthy as any other parts are, or not more disturbed. The close and multiform relations of the sexual organs with the mind, and with all parts of the system, are enough to make the disorders of these organs dominant in a disorderly, nervous constitution; but their relation to 'hysteria,' or to 'neuromimesis,' though more intense, is only the same in kind as that of an injured joint, or an irritable stomach. All, in their degrees, may be disturbers of a too perturbable nervous system; and equally on any one of them, the turbulence of a nervous centre may be directed, with undivided force."

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* Read before the Boston Society for Medical Observation, January 5, 1874.

I think my own experience corresponds entirely with the above views; and, still further, will bear out the assertion that there is the same relation between uterine disorder and hysteria in women, that there is between many cases of seminal weakness, so-called, and hypochondriasis in men, with the addition, in the latter instance, of an added sense of disgrace. I see no reason why one term should not be used for these two diseases, at least in the present state of pathological science.

In a paper which I had the honor of reading to this Society two years ago, and which was published in the JOURNAL of February 1st, 1872, I presented, indiscriminately, ten cases, including both hysteria and hypochondriasis, under the general term of neurasthenia. Perhaps *neuriasis* is the better substitute for hysteria, since it is unsuggestive of any theory of causation. It would, also, include hypochondriasis equally well. The English of it is simply *nervousness*, a word which has long been applied to cases of this class. It should be remarked here that hypochondriasis is certainly as neuromimetic as hysteria. Sir James Paget, in speaking of the relations between nervous mimicry and mental insanity, makes the following suggestive remark: "Surely," he says, "any nervous centre may go mad, as well as any part of the brain, which is appropriate to any part of the mind; and may be mad in different ways, including the idiotic, emotional, maniacal, or other forms of insanity."

I will report a case of nervous disorder, which has several points of interest, and which seems to require some other term than hysteria to properly designate it.

Mrs. A., aged 43, married and the mother of four living children, the youngest of whom is twelve years of age. Her father died of disease of the heart, at the age of sixty-five; her mother is still living, in good health. Hysteria, scrofula and phthisis have appeared in the family. The patient was a lady of much energy and ambition in social and family matters, but over-anxious and pains-taking to a fault; she was also of an excitable, emotional and demonstrative temperament. After the birth of her first child, she had a severe attack of hysteria, in consequence of exhaustion from a difficult labor and an instrumental delivery. She began, two years ago, to fail in health perceptibly, after a period of watching and of anxiety during her father's last sickness. Gradually, she became emaciated and low-spirited, but continued to perform her household duties scrupulously, refusing rest or vacation, and sparing herself in nothing. She refused to take medical advice, because she knew she should be compelled to take to her bed. She felt that if she once "gave up" she should be sick and die.

She was first seen April 3d, when her condition was found to be one of extreme debility. She complained of weakness, loss of sleep and of appetite, shortness of breath and palpitation on exertion, headaches, and pain under the left scapula, under the sternum, and in the region of the heart. She feared heart-disease, because her father died of it. She had previously felt what she imagined was a tumor, with tenderness, in her left side. This had vanished, but she now feared the existence of some abdominal tumor. There had, formerly, been great tendency to constipation, but now diarrhœa alternated with it. She had been troubled with hæmorrhoids. There was no great irregularity of the menses, though the "turn of life" was believed to be near at hand.

On examination, no evidence of heart disease was obtained. The pulse was 75, and quite weak. The patient was rather thin, and quite anæmic. The tongue had a thin, white fur. Complete cessation from household work and responsibility was enjoined, with breakfast in bed, and an afternoon *siesta*. Chloral hydrate, fifteen grains, bromide of potassium, fifteen grains, and bromide of ammonium, seven and a half grains, was ordered at bed-time; and phosphide of zinc, one-tenth of a grain, extract of nux vomica, one-half a grain, was given as a tonic. This was, in a few days, changed for elixir of the phosphates of iron, quinia and strychnia, with a view to more speedily affect the appetite. Malt extract at meal times was prescribed, and directions were given to administer strong liquid nourishment, of various kinds, in definite quantities, at regular intervals between meals and in the night.

Up to the 24th of April, her condition remained unchanged. The patient refused to take her bed, either in whole or in part, making the lounge an inefficient substitute. Once or twice, she fainted while sitting quietly in her chair. She *would* take direction of household matters, sewed occasionally, came down stairs once in the evening to entertain company, and once went to church when unfit to be out of bed. She slept better with the chloral and bromides, but could not, or would not, eat, except the very smallest quantities of the most useless delicacies. She complained of inability to swallow from a feeling of choking or suffocation while eating. Headaches were of frequent occurrence, and were only partially relieved by elixir of the valerianate of ammonia. Stimulants, in moderate quantities, were added to her diet at various times, with temporary benefit.

On the evening of the 23d, she went into the kitchen and found both servants absent, without leave. This fact at once induced an attack of hysterical delirium. She was put to bed, but kept up a continual outcry for hours, recognizing no one, and losing her own identity. She referred to herself as "that woman in bed who has the headache." She repeated, in a mechanical way, "oh, that knife! that knife!" putting her hands to her left side. She had, in the course of the first twenty-four hours, occasional tonic spasms of the hands, and sometimes general rigidity, controlled by ether, which was given once or twice quite thoroughly. Attention could be gained only for a moment. Her pulse remained constantly at 75, through all her apparent excitement. I regret not having taken her temperature at this time, as Dr. Ellis informs me he has found it as high as 103° in hysteria. Bromide of potassium, ten grains, bromide of ammonium, five grains, and acetate of morphia, one-twelfth of a grain, was ordered every three hours; one drachm of the fluid extract of senna was given every three hours, till an operation occurred.

The above condition lasted several days, the patient taking nourishment quite well, the pulse remaining at 75, and gaining a little in volume. Towards the last, a condition of alternating consciousness and delirium existed, the patient slipping easily, and at short notice, from one state into the other. This was followed, about May 2d, by a complete return to reason. The morphia and bromides were used only at bed-time, after the first day or two, substituting the fifteen-grain chloral mixture, or combining the two, as her condition seemed to require. After the operation of the senna, constipation returned, with bleeding, as if from piles, and great straining at stool, requiring the occasional use of morphia suppositories to relieve the tenesmus.

May 4th, all seemed to be going on well, though, in the evening, there was a suspicion of a cold. The eyes were a little suffused, the face flushed, and the pulse, for the first time, a little accelerated. I was unable to see her on the 5th, and on the morning of the 6th, I found a well-marked, segregated, papular eruption, perfectly resembling measles, covering the face, neck, chest and arms. It subsequently covered the whole body, lasting five or six days, disappearing first from the face and neck. It perfectly resembled an attack of measles, except, perhaps, in the absence of desquamation, and in its shorter duration. This patient had had measles when a child, and, also, an attack of what was supposed to be measles twelve years ago, after the birth of her youngest child. There were no cases of measles heard of in the immediate vicinity, and none followed exposure to the eruption in question. The patient went to church April 13th, and might, possibly, have been exposed at that time. With the eruption, the pulse went up to 100, and the temperature ranged from 102° to 103°. By the 9th of May, the eruption had disappeared, but was followed at once by a moderately jaundiced condition of the whole surface. The conjunctivæ were not affected. The patient's strength failed from this time more decidedly, though the ability to take nourishment increased. The hysterical delirium had disappeared when the eruption began. On the 12th, she felt sure she should not live, though she was in a calm state of mind. The constipation and straining were accompanied by considerable loss of blood. The urine, which had been pale and copious, became scanty, and dark with bile. Bitartrate of potassa was given in one-drachm doses, morning and night, till a fæcal discharge followed.

May 13th, Dr. Ellis was called in consultation. He could find no evidence of organic disease in the chest or abdomen, and suggested no change of treatment, except an increase of food and stimulant, in the form of brandy and milk, at short intervals. This was not well borne, the milk passing undigested in large quantities. The patient died of exhaustion, May 18th.

Autopsy, May 19th, by Dr. Rowe, and Mr. Mosely. I was called suddenly away, and could not attend. Dr. Ellis was, however, fortunately able to be present, and carefully examined all the organs of the head, thorax and abdomen, except the spinal cord. No trace of organic disease was found; none, at least, which could account for any of the symptoms, or the fatal result. No disease, ovarian or uterine, existed to account for the hysteria, or the fancied tumor. No piles, even, were observed. There was a staining of some parts, from excess of bile in the fluids of the body, but, otherwise, no appreciable disease. This result was not in accordance with the expectation of the friends, nor of the patient herself, at whose request the autopsy was made.

To conclude, we had in this case, debility, vigilance, anorexia, constipation, pain at the back, side, and front of left thorax, headache, emotional disturbance, delirium, convulsions, partial convalescence, febricula, papular eruption, jaundice and death, with no organic lesions at the autopsy. There was hysteria of an extreme character, without uterine or ovarian disease. The neuromimetic tendency was shown in the phantom tumors of the side and abdomen, and, perhaps, in the mock measles, for it is difficult to attribute the eruption to any contagion. The question has occurred to me, whether it could have been due to the very moderate use of chloral in her treatment. She took but fifteen grains daily (at times substituting the twelfth-of-a-grain morphine mixture), for three or four weeks previous to the date of the eruption. The supposed second attack of measles occurred twelve years ago, before chloral was heard of, but might, possibly, have been excited by the use of morphia. In the general turbulence of the nervous system, it is not impossible that the same nervous condition, with consequent eruption, was induced which legitimately follows the poison of measles.

THE STYLOID MUSCLES AND ANÆSTHETICS.

By G. W. Copeland, M.D., Boston.

Anæsthetics have of late received a large share of consideration from the medical profession; yet so long as deaths occur from their use, it is evident that there is a fault either in the drug or in the manner in which it is administered. Chloroform has been disposed of for the present on the ground that it contains a poisonous ingredient liable under any circumstances to produce death. Ether is more fortunate, for it has escaped censure.

Every medical man is familiar with the fact that, at a certain stage of anæsthesia, the breathing frequently becomes irregular and obstructed by what is termed "the tongue falling back in the throat." Let us look for one moment at the way in which the drug is invariably administered.

The patient, whether sitting in a chair or lying in the recumbent posture, has his head tilted back and is requested to open his mouth and "breathe hard." Now see what follows. So long as voluntary efforts on the part of the patient continue, all goes on well; but when unconsciousness takes place, the breathing, then involuntary, becomes impeded and oppressed. Several devices are immediately resorted to, such as drawing the tongue out with a tenaculum, a pair of forceps, or, as I recently saw in one of our hospitals, by a ligature passed through it and held by the fingers of an assistant. These procedures generally help, but seldom wholly relieve, the difficulty, so that the unconscious effort of the patient struggling for breath continues a source of anxiety to the assistants and often to the surgeon.

Having occasion to use ether quite frequently, and many times with no other help than the friends of the patient, I have at times been greatly troubled and embarrassed by the occurrence of this state of affairs. Failing, one day, to relieve the trouble by the usual plan of drawing the tongue out, I tilted the head forwards, closing the mouth, and established free and regular respirations through the natural channel, the nose. Since that time, I have repeatedly relieved the difficulty in this simple way.

Let us see what happens when the head is tilted back in the usual position. The styloid muscles are put on the stretch. The stylo-glossi draw the tongue backwards, the stylo-hyoidei draw the os hyoides upwards, and the stylo-pharyngei raise the pharynx and thyroid cartilage upwards, all thus uniting to close the epiglottis. Pulling out the tongue will partially overcome the action of the stylo-glossi, while the other muscles still maintain their action.

Now see what takes place when the head is tilted forwards. The styloid muscles are all relaxed, the tongue falls forward in the mouth and the larynx falls into its proper place, thus leaving the epiglottis free and the glottis unobstructed.

Here, then, I claim is the secret of preventing or relieving this trouble with the breathing. So soon as the patient becomes in the least unconscious, tilt the head forwards and make him breathe through the nose, which certainly was made for that express purpose. It seems nothing more than fair that we should give our patient, when unconscious, the benefit of having his head in a natural position, or at least in the position which he maintains when conscious.

INTESTINAL SAND.—M. Laboulbène has addressed to the Academy of Medicine a memoir on a hitherto undescribed substance, which he proposes to designate "intestinal sand." Six cases are related, in which it has been met with. It is not to be confounded with biliary gravel, or with small, stercoraceous concretions, but consists of small siliceous or vegetable particles, which are derived from without, and which form nuclei, around which accumulate layers of azotized matters, and of ammonio-magnesian phosphate. The mode of formation, therefore, is analogous to that of urinary calculi. The following are the general conclusions of the paper:—1. We sometimes find in the stools a sandy matter, which I propose to call "intestinal sand." It much resembles yellowish or brownish sand, the largest granules being from three-quarters to one millimetre in diameter, and the smallest three-tenths of a millimetre. 2. The surface is irregular, and covered by ragged crystals. 3. The sand always contains siliceous particles, encrusted by organic matters, and ammonio-magnesian phosphate, which is usually accompanied by vegetable cells, unattacked by the active liquids of the stomach and intestines. 4. This sand is derived from without, and seems to be produced in consequence of a too exclusively vegetable alimentation, and the unperceived, or even intentional, ingestion of siliceous particles. 5. Moderate purgation, and a diet in which nitrogenous food is predominant, seem the best remedies.—*Medical Times and Gazette*, Jan. 10, 1874.

Progress in Medicine.

REPORT ON OBSTETRICS AND DISEASES OF WOMEN.

By James R. Chadwick, M.D.

[Concluded from p. 188.]

Diseases of Women.

Sex in Education. By Edward H. Clarke, M.D. Boston, 1873.

This brilliant essay aims at pointing out some of the errors in our system of educating girls, errors which are fraught with evils so serious as to endanger, not only the present health of our women, but also the whole future of our nation. So grave a charge being thus brought against our schools and homes, it behooves us to scan narrowly the facts and line of argument upon which the author bases his views.

To be fair to the book, we must, in the first place, bear in mind that it is not addressed to scientific circles, who would have a right to demand an array of facts and statistics before yielding assent to the propositions set forth, but to the public, who can understand the physiological laws adduced in support of the position taken, and follow the train of argument, but who would be utterly incompetent to estimate the value of any clinical experience, which might be introduced. The book is, therefore, an exposition of the author's personal opinions, and is deserving of acceptance just so far as we have faith in the correctness of his knowledge and of his deductions. As a key to these, we have the physiological laws and typical cases that are scattered through the volume.

In the introductory chapter, the perfect equality of man and woman is insisted upon, but it is not meant that the sexes are identically the same. They differ greatly, not in the extent or amount of their power, but in the direction in which it lies. They are so nearly alike in some matters that they can interchange labor without perceptible difference; in others, a change cannot be effected without a loss in the amount or quality of the work accomplished. As an illustration of this, it is evident that "a girl can hold a plough and ply the needle after a fashion. If she can do both better than a man, she ought to be both farmer and mistress; but if, on the whole, her husband can hold best the plough and she ply best the needle, they should divide the labor."

With these preliminary points settled, Dr. Clarke next defines his use of the term education as not being in the limited and technical sense of intellectual and mental training alone, but as including, what its etymology indicates, the drawing out and development of every part of the system, comprising the whole manner of life, physical and psychical, during the educational period. Again, on page 24, he says that "the object of this paper is to call attention to the errors of physical training that have crept into, and twined themselves about, our ways of educating girls, both in public and private schools."

From these two statements, we are naturally led to expect that the book aims chiefly at demonstrating how erroneous and disastrous are the regulations prescribed by the schools for the preservation of the physical strength of our girls. It is, consequently, with some little surprise that, as we turn page after page, the conviction is forced upon us that the author has penned this philippic to show the errors in the mental discipline far more than those affecting the physical training of the scholars. The influence of "home-life and social-life" is not discussed, and hardly has a mention in the essay; this statement is made in the face of Dr. Clarke's protest in the note to the Fifth Edition, where he claims that his invectives are aimed at the errors which are sanctioned by them as much as by school-life. The testimony of the book itself is against him. In corroboration of this view, we need only to point at the typical cases cited in a subsequent chapter. Case I. is attributed, chiefly, to brain-work, and secondarily to muscular exercise necessitated by the school regulations; Case II., to muscular and brain work equally; Case III., to muscular exercise; Case IV., to brain-work; Case V., to brain-work; Case VI., apparently, to brain-work; Case VII., to "intellectual labor." The true aim of the paper seems to be to demonstrate that, during the first few years of puberty, a girl's mind cannot be cultivated persistently without entailing serious injury upon her reproductive system, and, secondarily, upon her general health. This fact our schools utterly ignore, and thus disseminate poor health and disease throughout the community.

The reason for a discrimination is, then, attributed to the monthly demands upon the female organism by the functional activity of the reproductive apparatus. These are peculiarly severe and trying during the first few years after the establishment of the catamenia, and this period, falling, as it does, between the ages of 14 and 18 years, unfortunately coincides with the period when the girl is making the greatest efforts to cultivate and train her mind by work at school. Yet, with precautions and limitations, this double demand for the development of the brain and of the sexual organs might be met without detriment to the health of the individual. Most of our girls, between the ages of 14 and 18, study five hours in school, and two or three hours at home every day; this, Dr. Clarke considers should be reduced to five hours a day, with a remission of one to three days every month. It is the educational methods of our school and colleges for girls which are, to a great extent, the cause of the many ills that beset American women, but they are not the sole cause. "We live in the zone of perpetual pie and doughnut, and our girls revel in those inassimilable abominations. Much, also, may be credited to artificial deformities, strapped to the spine or piled on the head, much to corsets and skirts, as much to omission of clothing where it is needed, as to excess where the body does not require it."

In the "Chapter chiefly Physiological," a tri-partite life is assigned to woman, the first period of which extends from birth to about the age of 12 or 15 years; the second from the end of the first to about the age of 45; and the third, from that time to the completion of life. The critical years are those of passage from one period to the next, and it is the earlier of these which we are now discussing. The organs peculiar to the female sex then enter upon a condition of functional activity. Nature has reserved one week in the month for the process of ovulation and for the development and perfection of the sexual apparatus. The system never does two things well at the same time; the muscles and the brain will not perform their functions, in their best way, at the same time; consequently, muscular work and brain work must be periodically remitted up to the age of 18 or 20 years, if we expect the reproductive system to do its task properly.

Both sexes alike possess certain organs of elimination, such as the bowels, kidneys, lungs and skin; but to woman alone, he claims, is entrusted the exclusive management of another process of elimination, namely, the catamenial function. "The reproductive apparatus of woman uses the blood as one of its agents of elimination. Kept within natural limits, this elimination is a source of strength. . . . . Beyond these limits, it is a hæmorrhage that, by draining away the life, becomes a source of weakness, and a perpetual fountain of disease." An imperfect performance of the functions, "by closing an avenue of elimination, poisons the blood, and depraves the organization." These quotations, as well as other passages (pp. 92, 96, &c.), show that the author still adheres to the old doctrines, which taught that an excrementitious element was expelled from the system in the menstrual discharge (analogous to urea in the urine), whereas modern physiologists and chemists have demonstrated conclusively that this discharge consists only of venous blood, with the admixture of uterine and vaginal mucus and a few epithelial cells (Krieger. Die Menstruation. Berlin, 1869. p. 102). This, too, is in accordance with recent microscopical researches (Kundrat and Engelmann, in *Stricker's Jahrbücher*, II. Heft, 1873), which have shown that the blood is simply extravasated into the cavity of the uterus, owing to a fatty degeneration which takes place in the walls of the capillaries distributed in the menstrual decidua. An arrest of the monthly flow is now generally regarded either as a symptom of anæmia, when it is really a conservative act of nature, or as due to some derangement of function, when it results not in a poisoning of the blood, but in the retention of an excessive amount of blood in the system, giving rise to a condition of congestion, both local and general, with its characteristic symptoms. A dissent from Dr. Clarke's physiology on this point does not, however, involve a disbelief in the harm likely to arise from any disturbance of menstruation.

Another statement which is hard to accept, in view of the contrary opinions expressed by the majority of authorities in this branch of medicine, is that which explains the occurrence of menorrhagia in school girls, by supposing a determination of blood toward the brain owing to its activity, and a consequent anæmic state of the pelvic organs, whereby "there is not nervous power enough developed in the uterine and associated ganglia to restrain the laboring orifices of the circulation." This cause of menorrhagia is overlooked by Duncan, Thomas, West, Barnes, and other gynæcologists; in fact, they all mention congestion of the pelvic organs as the chief source of excessive menstruation. It is to be remarked that from the preface we learn that "the subject is treated solely from the standpoint of physiology."

In the chapter on "Co-education," the common signification of the term is adopted, which "includes time, place, government, methods, studies and regimen. Age and proficiency, but not sex, is admitted as a factor in classification. Physiology protests against this, and this is the characteristic of the American school system. . . . Schools have been arranged to meet the requirements of the masculine organization. Girls' schools are modelled on boys' schools."

This peculiarity of our schools is the butt of the whole book. If schools can only be arranged, argues Dr. Clarke, so as to recognize the periodicity of the feminine organization, our women would have a fair chance of escaping the shoals toward which they are now steering. No suitable plan has yet been devised for meeting this necessity in mixed schools. Identical co-education is, consequently, a sharpened stake on which our nation is about to impale itself.

The concluding chapter endeavors to show that the European way of educating girls differs from our way in the essential points at issue. Two letters, from a German gentleman and lady, respectively, are introduced; their testimony is meagre and conflicting. Yet one point is of interest and importance, if true, namely, that German girls seldom attend school after 15 years of age, but pursue their studies at home; they are thereby able to take the needful relaxation once a month. On the other hand, it is explicitly stated that German girls make no change, provided the function is normally performed. Social restrictions are, however, imposed upon them by their parents, for it is mentioned that they are not allowed to ride, nor do they go to parties or dances. It is evident that the health-insuring regimen observed among our Teutonic friends emanates more from the home than from the school.

We are all immensely indebted to Dr. Clarke for tearing off the conventional fig-leaf which has hitherto prevented the public from discerning clearly that peculiarity of physical organization in woman which has stood in the way of her adopting the garb and habits of a man.

The book is not convincing—perhaps, owing to the reasons given in the first part of this abstract—but it has certainly done good service in opening up for discussion a subject well worthy of long, patient, and above all unprejudiced, investigation; having succeeded in this, the author will—to use his own words—be amply repaid for the time and labor of its preparation.

Colotomy.—In the *British Medical Journal* of November 15, 1873, Mr. Christopher Heath reports eleven cases of colotomy, all in women; three operations were for cancer of the rectum causing obstruction; three were for cancer before obstruction had occurred; three were for syphilitic ulcer and stricture; one was for fistulæ and ulceration (probably syphilitic), and one was for relief of a recto-vaginal fistula. The results were four deaths and seven recoveries. Several of the patients were greatly exhausted before they came under his care, but the author claims that the operation, if it can be performed in good season, may be regarded as a fairly successful one, and that the immediate risk is small. The operation is not difficult in the majority of cases, and even if the peritoneum is opened—which is not always avoidable—it is not necessarily fatal. Colotomy is distinctly curative in syphilitic ulceration of the rectum, and relieves the suffering, as well as prolongs the life, in cancerous disease, by preventing the occurrence of obstruction.

"*De nonnullis Sterilitatis Causis.*"—Under this ponderous title, Dr. Noel Gueneau de Mussy (*L'Union Médicale*, Dec. 4, 1873) publishes, in the Latin tongue, a paper, in which he points out what he conceives to be some of the moral causes of sterility. His reason for adopting a dead language, in which to clothe his ideas, was the desire to give his work "a more serious and exclusively scientific character," as well as "to cover certain crudities of expression, which the French language would not sanction." Now this inordinate affection for science and coyness about expressing indecent ideas would be very refreshing to see revived in the contemporaneous literature, dramas, journals, &c., of France, but its adoption for the pages of a journal addressed exclusively to scientific and professional circles savors much more of a desire for notoriety, than of an innate modesty on the part of its author. If a man's conceptions are too nasty to express in French, the civilized world should unite in protesting against his pollution of another language, and particularly a dead one, by making it the vehicle of his thought. As it happens, however, the ideas are neither altogether new, nor so very shocking.

Bibliographical Notices.

On the Government of the Retreat for the Insane at Hartford, Conn. Printed for private use. 1873.

THIS is a book of 125 pages, containing letters on the meaning of certain of the By-Laws of the Hartford Retreat, which have passed between Dr. James H. Denny, the late superintendent, and his trustees, as well as letters to Dr. Denny on the same subject, from many well-known authorities on hospital organization in this country. It has long been known and regretted that the Hartford Retreat, almost alone among similar institutions, has retained the obsolete, double-headed arrangement of superintendent and steward, with distinct and independent powers. This plan always has been, and always will be, subversive of proper discipline, giving rise to conflicts of authority and petty and annoying differences of opinion in regard to matters of importance to the well-being of patients. The system is bad, and has been almost entirely superseded of late years.

In the present case, there was no personal feeling involved in the controversy, which was conducted solely on the abstract merits of the question. Dr. Denny need not, however, have confined his search for precedents to this country, although our hospitals, civil and military, stand in the very foremost rank for perfection of organization. Dr. Manning, in his admirable report to the government of New South Wales, in 1867, made after a careful survey of the hospitals of Great Britain, concludes, in regard to superintendence and management, that "the whole internal economy of an asylum should be under the control of the superintendent." Dr. Wilkins, in his equally able report, made in 1872, to the government of California, after a prolonged examination of foreign hospitals, says: "Unfortunately, the custom still prevails in some of the asylums on the Continent of placing a (non-medical) director (steward) at the head of the institution." In Great Britain, he says, the superintendent "has supreme control of the asylum over which he presides, nominates his assistants and other officers, and selects his attendants."

The rules of the Surrey County Asylum provide, in accordance with act of Parliament, that the superintendent "shall have paramount authority in the asylum, subject to that of the visitors; shall have control over all officers, &c." Also, "there shall be a clerk of the asylum, who shall act as steward. He shall perform all the duties of both those officers, under the control and direction of the medical superintendent."

In 1840, the By-Laws of the Hartford Retreat were revised, with a view to promote harmony and efficiency of action on the part of its officers. The expressed intention was to place the government of the asylum *entirely* in the control of the superintendent. The terms were, however, so ambiguous as to admit of different constructions. Dr. Butler, during his long superintendency, succeeded in making a bad system work with less friction than would be possible for a new incumbent to do. Dr. Denny, relying on unofficial assurances of a favorable construction of the By-Laws on the part of the Board of Directors, accepted the position in 1872. Finding a difference of opinion in the Board, he at once made an effort to have the By-Laws revised on the basis of the "Propositions" adopted by the Association of Superintendents of American Asylums for the Insane in 1852. These give the nomination and direction of the steward to the superintendent. Dr. Denny's efforts, up to the time of his resignation, last December, to place the retreat on a level with other asylums in this respect, are detailed by George Wm. Curtis, President of the American Social Science Association, in *Harper's Weekly* for January 31st ult.

Letters endorsing the position of Dr. Denny were received from Drs. Ray, Nichols, Kirkbride, Tyler, Brown, Butler, Bancroft and Jelly, all well-known authorities in this country; from Maj. Gen. McDowell; from Wm. J. Sloan, Surg. U.S.A., and Medical Director of the Department of the South; from Dr. H. I. Bowditch, of this city, and from Dr. Cowles, of the Boston City Hospital, whose recent efforts for a similar change of by-laws have been more successful.

Dr. Denny is to be commended for his persistency in behalf of a principle fundamental to success in hospital management. The Directors of the Retreat will no doubt learn in time that gentlemen who fully appreciate the importance of it, will find the acceptance of office under their antiquated By-Laws inconsistent with self-respect. T. W. F.

The Sphygmograph: Its Physiological and Pathological Indications. The Essay to which was awarded the Stevens Triennial Prize, 1873. By EDGAR HOLDEN, A.M., M.D. Philadelphia: Lindsay & Blakiston. 1874.

THIS volume is the work of a zealous, patient, industrious observer. The author believes in his theme, and writes accordingly. We can think of him as holding toward the little instrument which gives the title to his essay the same feelings of intimate attachment which, it is said, Ole Bull has for his violin. He has confidence in the almost unlimited capabilities of the sphygmograph; he is assured, by his painstaking observations, that a great field of investigation is open to any one who cares to enter upon it. It is a pleasure to read a book so inspired with enthusiastic faith.

The key-note of the work is contained in the opening sentence, giving a definition of the sphygmograph as "an instrument which can automatically record the peculiarities of the arterial pulse." When Vierordt invented the instrument, its powers were said to be limited to recording the "force and extent of undulations" of the pulse; but at present, according to our author, the improved construction of the sphygmograph permits a wider significance in the tracing produced. After describing the device of Marey, with whom, more than with any other observer, the sphygmograph has been associated, the author indicates certain objectionable features in that invention, and shows how these defects have been removed in an instrument contrived by himself. The mechanical principles involved, the arrangements of levers by which the pulse communicates the pressure to be amplified and recorded, are essentially the same in both instruments; but the method of securing the desired record is different in the two cases. To illustrate by a somewhat crude image; in Marey's sphygmograph, it is as if a person wrote with a crayon on a vertical black-board, the surface of the board meanwhile moving from right to left; in Holden's, it is like writing with a pen on white paper, the paper meanwhile moving away from the writer, his pen being held stationary. In the former case, in other words, the card for the tracing is vertical; in the latter, it is horizontal. Certain modifications, also, in the manner of conveying the arterial impulse to the receiving-lever, and of graduating and recording the pressure required, are said to give the later device a superiority.

After a chapter devoted to the physiological and pathological indications afforded to the sense of touch by the pulse, as regards its frequency, rhythm, volume, strength and tension, the author proceeds to analyze and translate the sphygmographic tracing of the same phenomenon. The four parts of a typical tracing are termed "events," and each of these events means something with reference to the cardiac impulse. The first upward line marks the direct shock-wave; the second event, marked by an elevated curve, a little lower than the summit of the first ascent, is the systolic wave; the third event is the descending wave of the diastolic collapse; and the fourth "has generally been considered the diastolic expansion or recurrent wave." All these events are exposed to an infinite variety of modifications, depending on the equally infinite number of conditions to which the pulse is subject, both physiologically and pathologically. A single thought only is needed to recall the almost insignificant influences which would suffice to disturb the symmetry of the sphygmographic tracing, even in a healthy person; thus, rest and fatigue, the use of tobacco or of stimulants, a full stomach, even emotional impulses, as of anger or grief, can well be imagined to have a disturbing effect on the records of such a delicately contrived mechanism. Then, when the unlimited diversity of conditions which disease imposes on the place is considered, we can appreciate the author's remark concerning the "complex yet interesting study of sphygmographic hieroglyphics," and wonder at the patience which has for its aim the translation of such a varied language.

Nor do we withhold our admiration for an observer of such industry, even after he ingenuously confesses on the threshold that, the more minutely the tracings have been studied by himself, "the more firmly has the conviction grown that our present attempts at translation are defective." If the field of observation "has been pathless and virtually unexplored," it is a great gain to have a guide to the *terra incognita* who is at least undaunted by the difficulties in the way. How faithfully he has studied his art, may be inferred after an examination of his analysis of nearly three hundred tracings, *fac similes* of which are admirably given in the book before us. These observations illustrate the whole field of pathology. Those, however, which embrace the study of cardiac diseases are obviously of special interest, since it is in this direction that the sphygmograph has been most used. We cannot do more in this connection than to refer the reader to the carefully collated notes, assuring him that he will find much to reward his perusal.

Part III. is devoted to the study of sphygmographic observations in connection with the physiological effect of medicines on the pulse. The drugs selected for experiment were cannabis indica, gelseminum, aconite and quinine. The author's enthusiasm as an observer is attested in the recorded fact that, in the course of two hours and forty minutes, he took into his stomach *twenty-six grains* of the alcoholic extract of Indian hemp.

It is no disparagement to this book, or to its author, to remark that the perusal of the work will hardly tend to tempt the reader to go forthwith and purchase a sphygmograph. We doubt if the recent graduate will feel it necessary, for some years to come, to add this instrument to the stethoscope, the thermometer, the microscope, the speculum (save the mark!) of his armamentarium. Sphygmography is not yet a fixed science; its teachings are not yet dogmatic. Moreover, "the maze of uncertainty and doubt" that has hitherto surrounded the best observers, our author included, would be enough to appal the ordinary physician, even before he had fairly learned the intricacies of the instrument. The sphygmograph must, for a long time to come, follow and not lead in the line of the aids to diagnosis. What it will do in the future, we must trust will be fully developed by such earnest, patient, skilful workers as the author we have before us.

The book is presented very attractively, the imprint and the illustrative cuts being admirable. A few errors in proof-reading would doubtless disappear in a revised edition; and we trust, also, that certain peculiarities of orthography are accidental only. We do not find, in the last edition of Dunglison, the words "metrorhagia" and "progresso-loco-moto-ataxia," which occur here repeatedly.

F. W. D.

Clinique Chirurgicale de l'Hôpital de la Charité. Prof. **Gosselin.** Paris. 1873.

THE second volume of this work contains a number of lectures on diseases of the genito-urinary organs; we will only notice one important point relating to the causes of stricture of the urethra. Prof. Gosselin repeatedly asserts his strong conviction that the use of urethral injections in gonorrhœa is an unnecessary and often harmful means of treatment, being one of the most fruitful sources of stricture. His strong statements to this effect, coming from such an authority, will lead many of his readers to altogether discard this mode of treatment. Authorities of equal weight could easily be adduced in support of injections, but the limited space at our command forbids our attempting to discuss such opinions as may be brought forward in this very summary review, however little we may feel inclined to endorse them. In this connection, however, we are tempted to recall to our readers a valuable paper on Stricture by Bryant (*Guy's Hospital Reports*, 3d series, vol. viii.), in which the causes of the disease were carefully investigated in 646 cases; in only 78 of all these cases (12 per cent.) had injections been used at all, and with regard to this small proportion of cases, the question remains open whether stricture should be attributed to the treatment used or to prolonged urethritis, on which, in course of time, all known modes of treatment, injections included, are usually brought to bear.

BOOKS AND PAMPHLETS RECEIVED.

Second Biennial Report of the State Board of Health of California for the years 1871, 1872 and 1873. Sacramento. 1873. Pp. 235.

A Practical Treatise on the Diseases of Children. By J. Forsyth Meigs, M.D., and William Pepper, M.D. Fifth Edition, revised and Enlarged. Philadelphia: Lindsay & Blakiston. 1874. Pp. 1008. (For sale by James Campbell.)

The Puerperal Diseases. Clinical Lectures delivered at Bellevue Hospital. By Fordyce Barker, M.D. New York: D. Appleton & Co., 549 and 551 Broadway. 1874. Pp. 526. (For sale by Estes & Lauriat.)

Tenth Annual Report of the Board of State Charities of Massachusetts, to which are added the Reports of its several Officers. 1874. Pp. 151.

Formulas for Elixirs, adopted by the American Pharmaceutical Association at its twenty-first annual meeting.

Legal Responsibility in Old Age. By George M. Beard, A.M., M.D. Read before the Medico-Legal Society of New York. 1874. Pp. 42.

Yellow Fever Epidemic of Memphis, Tennessee, 1873, as observed by S. R. Le Monnier, M.D.

On Sarcomatous Growths of the Uterus. By William F. Jenks, M.D., Surgeon to the State Hospital for Women. Philadelphia: Collins, Printer. 1873. Pp. 15.

Addresses on the Occasion of the Commencement Exercises of the Medical Department of University College, delivered in Calvary Church, San Francisco. By E. R. Taylor and Prof. J. F. Morse. 1873.

Catalogue of the Library of the Surgeon-General's Office, United States Army. In three volumes. Washington: Government Printing Office. 1873.

Relations of Colorado to Pulmonary Consumption. By Thomas E. Massey, M.D. Denver. 1874. Pp. 26.

Galvano-Therapeutics. By David Prince, M.D., of Jacksonville, Ill. Philadelphia: Lindsay & Blakiston. 1873. Pp. 64.

The Student's Guide to Surgical Anatomy: being a Description of the most important Surgical Regions of the Human Body, and intended as an Introduction to Operative Surgery. By Edward Bellamy, F.R.C.S. Philadelphia: Henry C. Lea. 1874. Pp. 300. (For sale by A. Williams & Co.)

History of the American Ambulance established in Paris during the Siege of 1870–71, together with the Details of its Methods and its Work. By Thomas W. Evans, M.D., D.D.S., PhD. London: Sampson, Low & Co. 1873. Pp. 694. From Wm. Wood & Co. (For sale by A. Williams & Co.)

Boston Medical and Surgical Journal.

BOSTON: THURSDAY, FEBRUARY 26, 1874.

AT a special meeting of the College of Physicians of Philadelphia, held on February 18th, a report of the autopsy of the Siamese twins, so far as it had been completed, was given by Drs. Pancoast and Allen. The thorax had not yet been opened, nor had the connecting band been fully dissected. From Dr. Allen's report, however, we obtain a pretty accurate idea of the structure of the band. The ensiform cartilages are connected with one another by what is apparently a synchondrosis, with a median, bursa-like sac, which is not quite in the middle line of the band.

At the lower border of the band, immediately above the umbilicus, is a blind, peritoneal pouch, passing from the abdomen of Chang to the opposite side of the band. Immediately above this is a similar pouch, passing from the abdomen of Eng to the opposite side of the band. These pouches do not connect. There is, therefore, a complete separation of the two peritoneal cavities. The relations of these pouches directly suggest that they have had essential bearings to the umbilical vein of the funis, and are therefore termed the *umbilical pouches*. Dr Allen further states :—

"Above Eng's pouch, and between it and the under surface of the ensiform conjunction, is a second pouch prolonged from Chang's abdomen, which fairly reaches the peritoneal cavity of Eng, but is not continuous with it. Extending up into this pouch from Chang's abdomen is a process which suggested to the Commission the possibility of the transit of hepatic vessels. This view was rendered more probable from the fact that a similar process passed up into the band from the liver of Eng. Accordingly, the plaster injection, colored by ultramarine, was thrown into a tributary of the portal vein of Chang, when it was observed that the fluid passed freely into the liver of Eng, as well as into some of the mesenteric veins proper. It is my own hypothesis that this bond of union was the true hepatic tract; but in its present state, in the absence of evidence of any parenchymatous admixture about the vessels thus crossing the band, we prefer to denominate the transit as the *tract of portal continuity*."

A full account of the autopsy, so far as it has been conducted, is given in the *Philadelphia Medical Times* of the 20th inst., and two wood-cuts show clearly the relations of the two abdominal cavities.

THE resignation of Dr. James H. Denny from the office of Superintendent of the Hartford Retreat for the Insane cannot be allowed to pass without special notice. We have watched the course pursued by Dr. Denny, and the singular proceedings of the Board of Managers, with deep interest. We have always considered that Dr. Denny, during this protracted controversy, has been sustaining the honor of the whole profession in claiming for it a supreme control of the management of patients committed to its charge; and that he was also contending for a principle essential to the proper carrying on of an asylum for the insane. The facts are substantially as follows:—

The Institution is said to be governed by a Board of twenty Directors. These gentlemen make the laws, and that duty seems to be all that they do. They rarely, if ever, visit the Institution, and the whole practical guidance of it and the interpretation of the laws is committed to a Board of three Managers. From this anomalous and unfortunate arrangement, we believe all the trouble has arisen, and we cannot but fear that this arrangement, if it be allowed to continue, will always, in the future, cripple the Institution as it has in the past. As far back as 1835, that is nearly forty years ago, there was a clashing between the respective duties of medical superintendent and steward. Dr. Woodward, at that time, declined to accept the office of superintendent for the same reasons that Dr. Denny resigns now. In consequence of this difficulty, the By-laws were altered by the Directors in 1840, so as to make the Superintendent supreme. But here comes in the fatal influence named above.

The thanks of the profession are due to Dr. Denny, for the able and gentlemanly manner in which he has sustained its honor and its dignity in this contest. We cannot see how any intelligent, independent man can accept the office of superintendent while liable to meet with such difficulties as must inevitably arise under the present interpretation of the By-laws. Is it possible that the real friends of the Hartford Retreat can allow such a state of things to remain much longer? If so, we fear the days of its active usefulness are numbered.

A notice of the report of Dr. Denny's correspondence and other points relating to his resignation will be found on another page.

We understand that, on the 17th of this month, the Trustees of the City Hospital elected Dr. William E. Boardman and Dr. James R. Chadwick as Physicians to a new department. This is an out-patient department for the treatment of diseases of females. The two gentlemen have received the highest recommendations from physicians who know their qualifications, and we are told that the elections were unanimous. Dr. Boardman was formerly House Physician in the City Hospital, elected after a rigid examination. Dr. Chadwick held the position of House Surgeon in the Massachusetts General Hospital, and has since then been pursuing, in Germany, the study of the diseases of women. We congratulate the Trustees and the Hospital on the selections which have been made for the new service.

Gastrotomy in Extra-Uterine Fœtation.—Two cases have been reported to the Obstetrical Society of London (*Obstetrical Journal of Great Britain*, June, 1873) by Mr. Ross Jordan, of Birmingham, and Mr. John Scott, of London. The first was successful, but in the latter the woman died thirty-one hours after the operation. In both, the opening in the cyst wall was stitched to the edges of the abdominal incision, so that the cavity of the sac had a free communication with the outside. This was done for the purpose of allowing free exit to the pus which might result from suppuration of the placenta. This latter was not detached, for fear of hæmorrhage from the ends of the vessels that its removal would leave patulous, since there are no muscular fibres in the cyst walls which, by contracting, could close the orifices.

Dr. Keller, of Strasbourg (*Gazette Hebdomadaire*, No. 29), publishes two cases of extra-uterine pregnancy, in which gastrotomy was successfully performed by Dr. Kœberlé. His conclusions as to treatment are, that, in the first half of pregnancy, internal abortion should be brought about by the capillary injection of toxic substances; and a postponement of all interference, in the last half of gestation, until the full term has been reached, when gastrotomy should be performed for the purpose of extracting the child, whether living or dead. Nine cases of gastrotomy at full term are appended. The mother was saved four times and the child five times; in one of these instances, there being a twin pregnancy, the mother and both children were saved.

Cholera in Vienna.—Out of 4,300 persons attacked by cholera in Vienna, during the recent epidemic, the disease proved fatal in 2,200 cases.

The Hospitals.

MASSACHUSETTS GENERAL HOSPITAL.

(*Saturday, February* 14, 1874.)

Operations were performed in the following cases:—Disease of the Ankle-joint, Fatty Tumor, Tumor of Back, Hydrocele, Fatty Tumor, Fissure of Anus, Abscess of Thigh, Tumor of Finger, Abscess, Cancer of Pharynx, Wart.

Disease of Ankle-joint—in a male adult; the result of a neglected sprain received one year ago. Fistulous openings on both sides of the ankle communicated with the interior of the joint. Dr. Cabot said it would be injudicious to perform excision, as the patient's health had become so much impaired. He then amputated by making two lateral flaps and sawing the bones just above the malleoli. On opening the joint, gelatiniform degeneration of the cartilaginous surfaces was found.

Fatty Tumor—of five years' growth, in a woman aged forty, situated on the outer side of arm, large as a hen's egg, lobulated, fluctuating, adherent to deep fascia and integuments. Excised by a straight incision.

Tumor of Back—of the size of a lemon, lobulated and fluctuating. Dr. Cabot made a straight incision, and dissected the skin off the underlying growth, which proved to be lipoma.

Hydrocele—of the tunica vaginalis. It first appeared fourteen years since, and had been tapped once, two weeks ago. The fluid had again accumulated. Through the thin intervals of a generally thickened but not much distended sac, a tumor of the testicle could be felt. The testicle of the opposite side was also enlarged, hard and moderately tender. This condition of the parts, in connection with the fact that the patient had a cough, was thought to contra-indicate any other treatment than tapping. Half a pint of clear serum was drawn off, when a hard, irregularly shaped tumor could be felt, evidently due to chronic inflammation, and constituting what was formerly known as "scrofulous testis."

Fatty Tumor—about the size of a hen's egg, situated beneath the skin, midway between the crest of the ilium and the last rib. Dr. Cabot made a straight incision and excised it.

Fissure of Anus—in a man. He had suffered from considerable pain, and had lost blood during defæcation during the last seven months. Dr. Cabot ruptured the sphincter ani.

Abscess of Thigh—of four weeks' duration, in a young child with scrofulous antecedents. Dr. Cabot removed three ounces of thin pus by the aspirator.

Myeloid Tumor—on the finger of a man thirty-five years old. It first appeared at the middle of the second phalanx, and had been slowly growing for sixteen years. Two weeks ago, he jammed the tumor between two boxes; since then it has doubled. Dr. Cabot amputated at the metacarpophalangeal articulation.

Abscess—over the sternum of a male adult. Dr. Cabot opened it and examined for carious bone. None found.

Cancer of the Pharynx—in a man forty-seven years old. The disease was of long standing, and, recently, of very rapid growth. It had involved the whole pharynx, and had begun to encroach upon the adjoining parts. Within a short time, a mass had projected from the region of the right tonsil of sufficient size to interfere seriously with breathing and swallowing. Dr. Cabot removed a portion of it with the écraseur, remarking that the relief would be temporary only, and the patient was sure to die, the disease having progressed so far as to make any more radical operation impracticable.

Wart—of three months' duration, following the paring of an ingrowing toe-nail. Dr. Cabot excised the growth and removed a portion of the adjoining nail.

H. H. A. BEACH.

BOSTON CITY HOSPITAL.

AMONG the surgical operations performed last Friday, February 20, were the following:—

Excision of the Head of the Femur was done by Dr. Cheever. The patient was a child six years old. Symptoms of disease at the hip-joint had been noticed about six months. The child entered the hospital on the 10th inst., with a fluctuating swelling below the hip, flattened nates, muscular anchylosis of the joint, lameness and pain. A sinus, connecting with the joint, had opened in the upper third of the thigh on the outer side. There was grating when the thigh was flexed.

A V-shaped flap of the soft tissues was dissected from over the outer side of the joint, exposing the great trochanter. A quantity of pus escaped when the skin and muscles were divided. The caries involved the neck of the femur, so that the section of the bone was made with the chain-saw below the great trochanter. The acetabulum was partially eroded at the edge; not sufficiently so, however, to require interference. The head of the femur showed extensive erosion.

The flap was stitched back to the skin above, by a silver-wire suture, and the cavity of the wound was packed with sponge. The pus resulting from the disease had burrowed among the extensor muscles of the thigh; a counter-opening was made at the lowest part of this excavation, to allow drainage.

A male adult was presented, with a tumor overlying the costal cartilages on the left side, just above the free margin of the ribs. The growth was of six months' duration, lobulated, semi-fluctuating, painless and unattended by constitutional symptoms; it was growing slowly, and at present its outline was about five inches in diameter and irregularly circular. The diagnosis lay between a chronic abscess and a fatty tumor. An exploratory incision, made by Dr. Cheever, proved the affection to be an abscess connecting, by a sinus of the size of a goose-quill, with the inner surface of the ribs above. The probe, passed into this opening, failed to reach any carious bone. The abscess was freely incised, and left entirely open for the unimpeded discharge of pus.

A young man, aged nineteen years, was submitted to an exploratory operation for a Pistol-shot Wound of the Knee. The wound had been received twelve hours previously. On the inner side of the right knee, opposite the lower edge of the patella, was the wound of entrance; no wound of exit was apparent. When the limb was straight, the probe could not trace the track of the bullet beyond the subcutaneous cellular tissue; but, on flexing the knee, a distinct opening into the joint was detected. Dr. Cheever enlarged the wound of entrance by a crucial incision, when it became apparent that the ball had struck the internal condyle of the femur at the inferior and posterior part, and, having splintered the bone here, had glanced and was lost either in the joint or in the muscles of the calf. The joint was filled with blood. The bullet was not found.

Dr. Cheever remarked that the chances were that the case would terminate in amputation. To give the patient the best present chance, however, Dr. Cheever made a crucial counter-opening at the outer side of the knee, and syringed the joint with cold water. The limb would be put on a splint, in a semi-flexed position, and the opened joint would be freely irrigated.

In speaking of the prognosis, Dr. Cheever alluded to the case of compound fracture of the patella, with extensive injury to the knee-joint, reported in the JOURNAL of December 25th ult. That case was terminating favorably, the patient recovering with an anchylosed knee.

Other operations, performed by Dr. Cheever, were the tying of Hæmorrhoids, and the incision of a Palmar Abscess resulting from a compound fracture of a finger.

F. W. DRAPER.

Correspondence.

LETTER FROM AIKEN, SOUTH CAROLINA.

(From an Occasional Correspondent.)

AIKEN, S. C., January 15, 1874.

MESSRS. EDITORS,—At a time when the rude blasts of winter are suggesting to many of your readers the propriety, if not the necessity, of seeking a place of refuge for many of their chronic cases of pulmonary disease, a few lines giving my impressions of Aiken may not prove unwelcome. Of late years, its claims as a health-resort have been frequently brought before the profession by the works of Drs. Coffin and Geddings, and, more recently, in an admirable article by Dr. Wm. W. Morland, which was published in the last volume of the JOURNAL. But it is not to these alone that Aiken is indebted for large numbers of invalids, who each year pour in from all sections of the country; for, previous to their appearance, the laudatory letters of Thurlow Weed and others had attracted a crowd of visitors large enough to exceed the limited accommodations of the town—one hotel and three or four boarding houses. As a result of this overcrowding, many were forced to seek refuge in miserably built shanties, open on all sides to draughts from without, and to content themselves with food that was simply execrable. I mention these facts, because the reports of the sufferers of that period have deterred many of our physicians from sending their patients to Aiken. The principle that "the demand regulates the supply" has rectified these evils, and Aiken can now boast of two hotels equal to any south of Baltimore, and the fare is fully as good as that of the first-class houses of Boston and New York. To those who cannot afford the luxury of hotel life, or whose tastes lead them to prefer the quietude of a more limited circle, the private houses offer every comfort. Hotel and boarding-house keepers seem to be fully alive to the fact that their success depends upon the character and quality of their food, and rely principally upon the neighboring markets of Augusta and Charleston for their supplies.

On referring to a register kept at the Club Rooms, I find that, since 1870, the number of visitors has more than doubled. The town, although a little too much spread out, presents a neat and attractive appearance, and, with a small expenditure for evergreens, is capable of being made very beautiful. It was laid out when land was cheap, and, partly to diminish the risk from fire, and partly to prevent overcrowding, the projectors wisely determined to make the streets one hundred and fifty feet wide, and these constitute one of the chief beauties of the place.

The population is 1,800, one half of which are negroes of every grade of color, from the genuine Congo black to the yellow, and then upwards until the shade becomes so faint as to require the practised eye of a native to detect any mixture of races. The place is well provided with churches, there being no less than seven, five for the whites and two for the colored people.

Billiards, bowling and croquet, together with riding and driving, constitute the chief amusements. There is also a small theatre, in which, although not yet entirely finished, performances are occasionally given.

The town itself is situated in what is known as the Sand Hill region, a belt of country about thirty miles wide, extending from North Carolina through South Carolina into Georgia, and long noted for the salubrity of its climate. The soil consists of white sand, overlying a mixture of red sand and clay, which extends to a great depth. It is remarkable for its porosity, and even after the heaviest rains the water disappears from the surface with a rapidity that is truly wonderful. This rapid drainage of the ground not only contributes to the general healthfulness of the country, but also, by enabling the invalids to walk out within a few hours after a heavy rainfall, adds to the attractiveness of Aiken as a health-resort. As an evidence of the dryness of the soil, I would state that, on making wells, it is necessary to dig from one hundred to one hundred and fifty feet to reach water. Geologically, the Sand Hill region is said to "correspond with the point of transition from the tertiary to the primitive formation, and in some places presents an admixture of the elements characteristic of both." Such a soil is, of course, very poor, and, indeed, it is difficult to imagine how it is made to produce anything at all; but I am told that the farmers manage, by judicious cultivation, to make from a half to a whole bale of cotton to the acre, which is about an average crop for that staple. There are no water-courses in the immediate vicinity, the nearest stream being two miles distant.

The woods surrounding the town consist, for the most part, of lofty pines and an inferior species of oak called "Black Jack." These pine forests are very beautiful, and, in addition to their much lauded exhalations, afford shelter from the winds without materially interfering with the sunshine. The roads through them are, as a rule, quite hard and level, and a drive on a cool winter day is one of the most enjoyable features of Aiken life.

Aiken is about 600 feet above the sea level, and is the most elevated point in this section of country. The mean temperature of the six colder months is 52°, which is about the same as that of Mentone, and ten degrees colder than Florida. The temperature is, however, far from being uniform, and, like the whole of our Atlantic coast, is subject to sudden changes; but I doubt very much the possibility of finding a sanitarium east of the Rocky Mountains to which the same objection does not apply with even greater force. Any one coming to Aiken with the expectation of finding continuous warm weather during the winter will be disappointed, especially if he arrives in December or January, during which months the mercury sometimes falls to 21°, and has, at rare intervals, been known to touch 17°. But these extremes are very unusual, and never of long duration. They are, of course, unpleasant, and may necessitate confinement to the house for a day or two, but, thanks to the excellent ventilation afforded by the large open fire-places with which the rooms are heated, the invalid has a constant supply of fresh air, and does not suffer as he would in a closely built, furnace-heated house at home. They are sure to be followed by days when, to use the words of an enthusiastic lay writer on Aiken, "the air seems so full of sunshine that it cannot hold it, but sends its exhilarating and electrifying sparkle, not only into the lungs, but into every tissue of the body." The language, although not very scientific, is very expressive of the grateful feelings of the writer. I have travelled over a very large portion of this continent, and also that of Europe, but nowhere have I ever found a climate so dry and bracing as that of Aiken during the clear weather of autumn, winter and spring. The annual amount of rain is about fifty inches, the greater portion being in summer. As far as I can learn, there are but three or four days in each month during which it is necessary for the invalid to remain altogether within doors.

The mean height of the barometer is 29·16 inches. The climate is essentially tonic in its character, and consequently well adapted to diseases of an asthenic type, especially cases of chronic phthisis. The local physicians complain, and, I think, with justice, of the loose manner in which patients are advised to go South, without specifying, in many instances, any particular locality, leaving it optional with them to stop at Asheville, at Aiken, or to keep on to Florida. Others advise them to try Aiken, and, in the event of its not agreeing with them, to go to Florida, and *vice versâ*. The consequence of this indefinite advice is that the patient, naturally discontented and anxious for change, runs off on the first approach of bad weather, without having given the first place a fair trial, and thus, in many cases, diminishes his chances of recovery. The study of climatology is the poor, neglected step-child of medical science in this country, and I do not believe there are a dozen physicians in the northern States who are conversant with the climatic peculiarities of the most noted southern sanitaria, and this, too, in a section where more than fifteen out of every hundred deaths are caused by consumption. There are few consumptives that would not derive some benefit from a residence in Aiken, and I have seen several persons in whom the disease has been entirely arrested. There is, however, a small number of cases for whom the air of Aiken is too bracing, and in which, for obvious reasons, a warm, moist atmosphere is better calculated to allay irritation and check the progress of the disease. Cases of chronic bronchitis, attended with much secretion, improve here very rapidly, whereas those characterized by a dry, hacking or spasmodic cough will do better in Florida or Nassau. Neuralgic cases I would advise to stay away, the stimulating properties of the air being more likely to aggravate than to allay their sufferings. With rheumatic patients it is a matter for experiment, some cases doing remarkably well. The same may be said of the so-called "asthmatics," except that the number of those who have obtained relief is much greater. Convalescents from long and tedious illnesses, like typhoid fever, &c., regain their strength and shake off lingering bronchial difficulties very rapidly in Aiken. And, lastly, but not least, for delicate children, whose constitutions have become impaired, either by hereditary or acquired diseases, I think the climate of Aiken cannot be surpassed.

I would refer those who are desirous of more detailed information to the resident physicians—Drs. Geddings, Coffin and Rockwell, all of whom are intelligent and experienced practitioners, and well posted in the class of cases they are called upon to treat.

OBSERVATIONS ON CHOLERA.

MESSRS. EDITORS,—Will you please print the following facts and conclusions of Dr. J. M. Cunningham, Sanitary Commissioner with the Government of India, in his Report of the Cholera Epidemic in India, in 1872. They have been condensed from a notice of Dr. Cunningham's Report in a late number of the *London Medical Record;* and they are especially interesting in connection with the opinions maintained in this JOURNAL, in numbers of January 18th, March 1st, and December 20th, 1866, to which any of your readers interested in the matter are referred.

Yours, OBSERVER.

CHOLERA—followed its common period of seasonal development; one remarkable feature was the occurrence of the disease at hill-stations. The fact that the epidemic attained its greatest violence at or about the same time in many places, separated from each other by hundreds of miles, is of great importance in an epidemiological point of view; the rise and fall of the disease corresponded remarkably in cantonments and cities adjoining; importation could not be traced; too much importance has been attached to pilgrims as carriers of cholera; no evidence that it was propagated along the main lines of communication; and the disease did not travel more rapidly than it used to do when there were no railways; no evidence of risk in attending on the sick; general direction of the disease, northwest; water theory inconsistent with the geographical distribution of the epidemic; not connected with any particular well; attacks in different sections simultaneous; maximum at the same period; so the decline; no case has ever been recorded in India in which there is good reason to suppose that cholera discharges have caused cholera; quarantine measures were of no use; enforced isolation very hard on the general population, and unnecessary; troops moved have never been known to be the means of spreading the disease.

Obituary.

DR. R. C. M. WOODWARD.

DR. WOODWARD, whose death occurred in St. Albans, Vt., on the 21st of November last, was one of a large family of physicians whose record is quite notable. He was a nephew of Dr. Theodore Woodward, of Castleton, who was the founder of the first medical school in Vermont. In addition to his uncle, Dr. Woodward had one brother, one son and several cousins who were graduated in medicine. A cousin, Dr. A. T. Woodward, of Brandon, and his son, Dr. George Woodward, of Johnson, are the only surviving members of this large family of physicians.

For the past fifteen years, Dr. Woodward has had a large and lucrative practice in St. Albans, and was but fifty-four years of age at the time of his death, which took place quite unexpectedly. He was an able, highly cultured physician, and was held in high esteem by his brethren in the profession.

DR. HENRY MILLER.

AT a meeting of the physicians of Louisville, Ky., the following resolutions were passed upon the death of Professor Miller:—

Resolved, That we have heard of the death of our distinguished brother with sincere sorrow.

Resolved, That it is our pleasure to testify to his spotless character as a citizen, his great and deserved reputation as a practitioner, his uniformly honorable career as a teacher, his eminent success as an author, his unblemished record in his relations with his brethren; to the entire confidence inspired by him among the sick entrusted to his care; to the valuable services rendered by him to the many medical societies which he fostered and instructed; to his admirable observance of all professional rules and requirements, as the result of which he signally secured dignity and respect for that profession which he so eminently adorned.

Resolved, That we tender to his family our sincere sympathy; that a copy of these resolutions be sent to them; to the daily press of this city; to the medical journals of the State; to all of the medical associations, domestic and foreign, of which he was either a regular or honorary member.

Resolved, That we will attend the funeral in a body, and unite with his very many bereaved friends in performing the last sad obsequies in behalf of one whose memory, his city, his State, his country and his profession will ever cherish with pride and admiration.

Medical Miscellany.

THE last report of the death of Dr. Livingstone, from dysentery, seems at length to be confirmed beyond a doubt.

"To bed this night, having first put up a spitting sheet, which I find very convenient."—*Pepys's Diary*, vol. i. p. 350.

To prevent surgical instruments from rusting, smear them occasionally with a little strong mercurial ointment.

DOUBLE PLACENTA.—Dr. I. D. Bogart reports a case of double placenta occurring in a delicate woman suffering from phthisis. One placenta was about two-thirds the size of the other, the cord of the smaller one being about eight inches long, and terminating in the main placental cord.—*The Canada Medical Record*, Jan., 1874.

MONSTROSITY.—At a recent meeting of the Surgical Society of Vienna, a girl was exhibited who, though but seven years old, possessed the breasts and sexual apparatus of an adult, and had menstruated regularly since the age of seven months. The weight of the child was seventy pounds.

"WHAT pleased me most, was Sir G. Ent [President of the College of Physicians] about respiration; that it is not to this day known, or concluded on, among physicians, nor to be done either, how the action is managed by nature, or for what use is it."—*Pepys's Diary*, vol. ii. p. 346.

REMOVAL OF THE VERMIFORM APPENDIX.—Mr. Bradley, of Manchester, in operating for the relief of a strangulated inguinal hernia, found the vermiform appendix lying in the opening, perfectly black and apparently lifeless, and accordingly removed it by means of a catgut ligature. At the end of a week, the patient appeared tolerably well, but imprudent eating induced severe vomiting, and he eventually died from exhaustion.—*British Medical Journal*, Jan. 24, 1874.

POISONING BY QUACK PILLS.—A man, aged 23 years, recently died in Hitchin, England, under suspicious circumstances, after having taken four or five pills obtained from a notorious quack, who styled himself "Professor" Morris. At the *post-mortem* examination, indications of irritant poisoning were found in all the principal organs, while a chemical analysis showed the presence of arsenic in the stomach, spleen, and in the pills remaining in the box from which the patient had taken the others. A verdict of manslaughter was found against the quack by the coroner's jury.

BLOODLESS OPERATIONS by constriction seem to have some drawbacks; among which are temporary paralysis of the vessels (the skin becoming intensely red after removal of the India-rubber); capillary bleeding, which is sometimes considerable; possible danger of putrid infiltration in cases with septic discharges; and paralysis of nerves from their too great compression against bones. Two cases of pressure on the median are reported, which lasted, however, only a fortnight, and one which was discharged in three weeks not recovered from.—*Medical Times and Gazette.*

SUBSTITUTE FOR TRANSFUSION.—Dr. Karst, of Kreuznach, proposes to substitute for transfusion the subcutaneous injection of defibrinated blood. He claims that, if a number of points be selected for the operation, from one to two ounces of blood may be readily introduced at one sitting. It is believed that this method may be employed in certain diseases characterized by anæmia, or chlorosis, as a means of imparting strength to reduced patients. In other conditions, such, for instance, as stricture of the œsophagus, it might take the place of nutrient enemata.—*Berliner Klinische Wochenschrift*, Dec. 8, 1873.

The Army Medical Staff.—At a meeting of the Boston Society for Medical Observation held the 2nd inst., the following resolutions were unanimously adopted:—

Resolved, That, in the opinion of this Society, the Army Medical Staff is entitled to the same consideration in the matter of rank and pay as is accorded by law to other Army Staff Corps and to the Medical Department of the Navy.

Resolved, That the removal of the prohibition concerning promotions and new appointments in the Medical Staff of the Army is desirable in the interests of the public service, to secure such reliable and efficient medical attendance in cases of wounds and sickness as the government should provide for its troops.

NOTES AND QUERIES.

A Correspondent sends the following reply to a query in the Journal of Feb. 5th, concerning the technical expressions of specialists:—

In testing the hearing, it is customary to measure the distance at which the watch and the voice can be heard. Therefore, translate "W. l. ¾''," watch, left, three fourths of an inch; "V. l. 10'," voice, left, ten feet; the marks ('') (') being very commonly, if not universally, used in scientific works to express inches and feet as well as seconds and minutes.

Boston, February 4, 1874.

Messrs. Editors,—My attention has been called to a circular in which my name is given, among others, as ready to vouch for an article called "Aromatic Liquid Pepsin." It is sufficient to say that the use of my name is entirely unauthorized, and I doubt not the case is the same with the other gentlemen.

It is possible I may have seen the article; I am in no way familiar with its appearance or properties. I have never prescribed or used it, and, with my present distrust of unofficinal preparations of pepsin, I certainly never shall. Francis H. Brown.

Heller's Urinometer.

Messrs. Editors,—Inquirer "P" in the Journal of January 22d ult., is not the only sufferer who possesses a Heller's urinometer and does not know how to use it.

The scale of Heller's urinometer is divided into *eight* principal divisions, each of which corresponds to *seven* degrees of specific gravity. Again, each of these divisions is subdivided into *four* equal parts, so that each subdivision corresponds to one fourth of seven, or one and three fourths degrees of specific gravity. The scale is, therefore, graduated for liquids having a specific gravity of from 1000 to 1056.

It is an extremely convenient instrument, when we have but a small quantity of urine at our disposal, and is far more accurate than many of the *cheap* urinometers, some of which I have found to vary eight or ten degrees in the most important part of the scale, between 1020 and 1030. E. S. W.

Died,—In this city, 19th inst., Dr. Abijah W. Draper.

Mortality in Massachusetts.—*Deaths in seventeen Cities and Towns for the week ending February* 14, 1874.

Boston, 147; Worcester, 18; Lowell, 24; Milford, 4; Chelsea, 5; Salem, 7; Lawrence, 10; Springfield, 11; Lynn, 14; Gloucester, 11; Fitchburg, 4; Taunton, 7; Newburyport, 5; Somerville, 12; Fall River, 12; Haverhill, 6; Holyoke, 4. Total, 301.

Prevalent Diseases.—Consumption, 54; pneumonia, 41; scarlet fever, 16; typhoid fever, 14.

GEORGE DERBY, M.D.,
Secretary of the State Board of Health.

Deaths in Boston for the week ending Saturday, Feb. 21st, 143. Males, 73; females, 70. Accident, 2; apoplexy, 4; asthma, 1; aneurism, 1; inflammation of the bowels, 1; bronchitis, 4; inflammation of the brain, 2; disease of the brain, 3; burned, 1; cancer, 2; carbuncle, 1; consumption, 22; convulsions, 3; croup, 1; debility, 5; diarrhœa, 2; dropsy, 3; dropsy of the brain, 4; diphtheria, 1; erysipelas, 2; scarlet fever, 11; typhoid fever, 1; disease of the heart, 3; hæmorrhage, 1; disease of the hip, 1; homicide, 1; intemperance, 4; disease of the kidneys, 2; disease of the liver, 1; congestion of the lungs, 3; inflammation of the lungs, 15; marasmus, 7; neuralgia, 2; old age, 2; ovarian disease, 1; pleurisy, 2; pyæmia, 1; puerperal disease, 1; premature birth, 3; peritonitis, 2; rheumatism, 3; stricture, 1; scrofula, 1; teething, 2; tumor, 1; whooping cough, 3; unknown, 3.

Under 5 years of age, 51; between 5 and 20 years, 12; between 20 and 40 years, 26; between 40 and 60 years, 32; over 60 years, 22. Born in the United States, 88; Ireland 40; other places, 15.